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## **ABSTRACT OF THE DISCLOSURE**

An optical disc reproducing device (hereinafter referred to as a CD player) that reproduces a CD (Compact Disc) audio signal, and more particularly, an apparatus is provided, which is designed to accurately control the speed of a spindle motor by reflecting the gap between two points in a buffer where data is recorded and the recorded data is read respectively. The spindle motor speed control apparatus of the CD player which reproduces an audio signal using data reproduced by the disc and buffered on the buffer includes an EFM demodulator, a frequency error measurement unit, a buffer, a lead/lag detector and a motor control signal generator. The apparatus can dynamically control the speed at which data stored on the disc is read more easily and reliably by controlling the spindle motor speed.